

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for ranking services in a web services architecture having a hierarchy of services with a root originating service requestor, a service of a first level in the hierarchy calling a service of a lower level, the method comprising:

indicating a preference regarding at least one service and a ranking machine having a choice algorithm based on the preference;

invoking services of at least one level of hierarchy;

finding a set of possible lower-level services by a service using a directory at each level of the hierarchy; and

applying the choice algorithm to the set of possible lower-level services, wherein the lower-level services are selected from service requestors or service providers;

referring the set of possible lower-level services to the ranking machine from the directory and returning a preferred sequence by the ranking machine to the directory, and the referring the set of possible lower-level services to the ranking machine from the directory is not visible to the service using the directory; and

sending the set of possible lower-level services by the service using the directory to the ranking machine and returning a preferred sequence by the ranking machine to the service, wherein lower-level invocations of services in the hierarchy are not visible to higher-level services.

Claims 2-12 (Cancelled)

13. (Currently Amended) A web services architecture comprising:

a root originating service requester;

a hierarchy of services in which a service of a first level calls a service of a lower level;

a directory for finding services in the hierarchy;

a ranking machine configured to apply a choice algorithm for services based on the originating service requestor's preference regarding one or more services; wherein[[],]

at each level of the hierarchy, the directory provides a set of possible services and the ranking machine applies the choice algorithm to provide a sequence of preferred services,

the lower-level services are selected from service requestors or service providers;

the ranking machine is connected to the directory by a port and the set of possible services is referred to the ranking machine by the directory and the sequence of preferred services is returned to the directory by the ranking machine,

a service of a first level finds a service of a lower level by means of a UDDI directory,

the ranker machine has a port on the UDDI directory and processes flows turning TModel bags into a selected set of TModels,

each UDDI operation is referred to the ranking machine and returned as a sequence conforming with the service requestor's preference, and

underlying UDDI application code carries out the referral and appends the location of the ranker machine to subsequent XML flow.

Claims 14-19 (Cancelled)

20. (Currently Amended) A computer program product for a web services architecture having a hierarchy of services with a root originating service requestor, a service of a first level calling a service of a lower level, the computer program product comprising:

a computer readable medium having computer readable program code embodied therein, the computer readable program code comprising computer readable program code configured to cause a computer to perform the operations of:

~~computer readable computer code configured to indicate indicating~~ a preference regarding at least one service and a ranking machine having a choice algorithm based on the preference;

~~computer readable computer code configured to invoke invoking~~ services of at least one level of hierarchy;

~~computer readable computer code configured to find finding~~ a set of possible lower-level services by a service using a directory at each level of the hierarchy; and

~~computer readable computer code configured to apply applying~~ the choice algorithm to the set of possible lower-level services, wherein the lower-level services are selected from service requestors or service providers:

referring the set of possible lower-level services to the ranking machine from the directory and returning a preferred sequence by the ranking machine to the directory, and the referring the set of possible lower-level services to the ranking machine from the directory is not visible to the service using the directory; and

sending the set of possible lower-level services by the service using the directory to the ranking machine and returning a preferred sequence by the ranking machine to the service.

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wherein lower-level invocations of services in the hierarchy are not visible to higher-level services.